

DOCUMENT RESUME

ED 201 779

CE 028 750

AUTHOR Paul, Krishan K.
 TITLE Vocational Education for Job Creation.
 INSTITUTION American Vocational Association, Inc., Arlington, Va.
 PUB DATE 16 Apr 81
 NOTE 19p.; For a related document see ED 189 460. Paper presented at the Annual Meeting of the American Educational Research Association (Los Angeles, CA, April 16, 1981).

EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Economic Development; Industrial Training; *Information Dissemination; *Job Development; Job Training; Linking Agents; Program Development; *School Business Relationship; *School Role; *Vocational Education

ABSTRACT

In addition to vocational education's role in training workers for jobs, vocational education has an additional role in helping to create jobs for workers by cooperating with industry and with economic development agencies. There are three ways that vocational education helps industry to promote economic development and create jobs. They are (1) new-industry training, (2) existing-industry assistance, and (3) self-employment training. To see how vocational education is fulfilling its job development role, the American Vocational Association has been conducting a project to identify and promote linkages among vocational education, industry, and state and local agencies for the purpose of economic development. All 50 states were surveyed to identify exemplary projects. Seventeen state and local programs were selected for a detailed study which is still in progress. However, several characteristics of effective linkages and mutually beneficial relationships between industry and education are already evident. Some of these characteristics include strong and dedicated leadership; flexibility; mutual respect and trust; the absence of "strings"; and providing a needed service for the area. Information collected from the field studies is being analyzed and will be used to promote new programs at places where they do not exist. During the final phase of the project, dissemination workshops will be held in different parts of the country to encourage the development of closer linkages among vocational education, communities, and industry. (KC)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED201779

CE 028-750

VOCATIONAL EDUCATION
FOR
JOB CREATION

BY
KRISHAN K. PAUL

American Vocational Association
Arlington, Virginia

April 16, 1981

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Krishan K. Paul

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

VOCATIONAL EDUCATION FOR JOB CREATION

Introduction

Vocational education's stake in the economic growth is heavy and vital. Vocational Education's role in our society is both to seek economic equity and to improve quality of life. The two, sometime conflicting, objectives require that all persons youths and adults, be afforded an opportunity to be productive citizens in the technological society which requires a high level of skill and educational attainment. Vocational education provides that opportunity through its secondary, post-secondary and adult education programs to persons who totalled 19.6 million in 1978.

A second role of vocational education requires it to serve the skilled-worker needs of the nation's business and industry. Until recently, this role has been played by vocational education institutions by training persons for the industry's expressed needs only. In this passive role of vocational education, training is provided for only those jobs which already exist. Projected demand for workers on the existing jobs is sometimes the only criteria for offering vocational education programs in schools. However, vocational educators are finding out that reacting to existing industry needs only is not enough if they (the educators) were to meet all the career aspirations of their students. So, they have started looking for, (and in many cases, finding) a more pro-active role for vocational education in the job market. A number of states have tried and succeeded in developing this role of vocational education in creating new jobs by helping the industry. Other states are anxious to follow the lead

The AVA Project

It was in the light of such a dual role for vocational education that the American Vocational Association, under a contract with the U.S. Office of Education, undertook a nationwide study to examine its role in the job creation process. The overall goal of the project was to identify and promote linkages among vocational education, industry, and other state and local agencies for the purpose of economic development. Specifically, the project had the following three objectives:

- o To conduct a nationwide search to identify and assess innovative vocational education programs that support economic development, i.e. job creation/development.
- o To disseminate nationwide the important features and characteristics of selected successful programs through publications, workshops and presentations.
- o To provide technical assistance to encourage new programs to develop linkages among vocational education, economic development agencies/organizations and business and industry.

In order to achieve the above stated objectives, all fifty states were surveyed to identify exemplary programs. Seventeen state and local programs were selected for a detailed study which is still in progress. During the last phase of the project, AVA will provide technical assistance to communities and states that wish to start new linkage programs to promote job creation and job development.

Vocational Education's Role

Historically, vocational education's early emphasis was placed on generic occupational skills which were believed to relate to large families of jobs. Such skills, according to vocational educators of the 1920's, could best be learned in agriculturally and industrially oriented programs with the schools teaching basic skills and the industry providing on-the-job training which was considered essential to perform on industrial jobs. Then came the World War II when trained workers in large numbers were needed to keep the war machine working at a high pitch and level of productivity. Vocational education played an important role during the war-years. Secondary and postsecondary vocational education programs provided specialized training to thousands of youths and adults who worked in the factories producing armament, vehicles, and a large number of other supplies necessary to sustain the war effort. More importantly, however, for the first time vocational educators and the employers realized the potential of vocational education to train the workforce so that very little on-the-job training would be required from the industry. In other words, industry could hire a vocationally trained worker and that worker would be productive from almost the first day on the job.

Over the years, the relationship between industry and vocational education has become cordial and close. This relationship is indicated by the confidence industry has in vocational education as evidenced in various surveys. A recent one conducted by the Conference Board in New York (Lusterman and Goulin, 1980) reported that a management consensus among the 44 top-level executives existed on the following lines.

The functional role of business in education is basically governed by a system of divided responsibility in which the schools are expected to impart general work skills and competencies and employers to provide whatever additional instruction or training needed to adapt these to their particular needs.

Commenting on the shortage of trained workers in the jewelry industry, a top executive in jewelry industry made the following observation :

(Balfour, 1980):

It was determined that vocational schools present that (demonstration of career possibilities) opportunity. The vocational schools' importance to all industry is well known. A student entering the work force from a vocational school can save an employer \$6,000 to \$10,000 per employee in training costs.

New Role in Economic Development

During the 1960's when some of the Southern states started a concerted effort to attract new industries, vocational education's potential to train the workforce became an important tool in industrial recruitment. Now, most Southern, and many Northern and Mid-western states routinely use specialized vocational training (sometimes also known as customized training or start-up training) to help states and communities to create new jobs by new plant locations or by helping the existing industries to expand.

While vocational education by itself does not create jobs, it does play an important role in the job creation process. Of course, workers can be helped to find or create their own jobs. But, for the most part, jobs are created by the private sector as a by-product of efforts to create profits. Vocational Education's role is confined to helping the private sector with a suitably trained workforce that is productive and competitive in the marketplace -- in essence, helping the private sector to be profitable. Other governmental and private sector organizations and agencies also work for the same objective. Often, they all work together with vocational education to help industry create jobs.

There are three ways the vocational education helps industry to promote economic development and create jobs. They are (1) new-industry training, (2) existing industry assistance, and (3) self employment training. Following is a brief description of the three types of vocational programs that are

currently being offered in different states.

New-Industry Training. By far, the most popular vocational training for economic development is the new-industry training. In its simplest form, known as pre-employment training, an industry that decides to locate a new industrial plant (or a new warehouse, showroom, retail store, etc.) is promised by the state or local government various types of assistance specifically in the areas of recruiting, screening, and training of workforce, strictly according to the employer's specifications. Pre-employment programs are short-term in duration, specific in nature and are conducted in the evening, near the employer's existing or proposed facilities. The training, although specifically created for the client employer, does not obligate him to hire every trainee that completes the program. In practice, however, most of the trainees do get hired. Except some minor differences in methods of providing the service, almost all states offer some assistance to industry in terms of pre-employment training. The differences are not in the intent of the programs, but are in their administration.

All new-industry programs are not conducted by state or local vocational education institutions. In some states, such as Louisiana, the economic development agency contracts and delivers the training services to the industry with varying degrees of contribution from the state or local vocational education institutions. On the other hand, in Oklahoma, the State Department of Vocational-Technical Education performs all training functions that are associated with new-industry training. South Carolina represents another class of states where community college system plays a dominant role in delivery of training services to new industries.

At the local level, area vocational schools, vocational-technical centers, community or junior colleges either alone or jointly provide training services to new industries locating in their areas. Among the state agencies and local institutions, the question as to who plays a leadership role depends

on local conditions and the legal/traditional relations between the principal actors. More often, however, the leadership is bestowed by legislative fiat or executive order of the Governor.

In a recent survey of 50 states conducted at the AVA, seventeen states were found to have been operating new industry programs for more than five years. Fourteen states reported programs from one to five years old, and the rest were either less than one year old or had yet to start a regular program. Many states from the last group had only ad hoc arrangements to provide training services to new industries. Results of the survey can be seen in Table 1.

Funding for most (eighty percent) of the new-industry training programs comes from state or local sources. Most of the states that had on-going programs used only state funds because "it allowed them complete flexibility and freedom" from federal regulations.

Existing Industry Service. Despite the aura and glamour surrounding new-industry locations, most jobs are created by expanding industries and businesses rather than those relocating from one state/community to another. In a landmark study of 5.6 million business establishments in the United States, it was found that (Birch, 1979):

- ...Small firms (20 or fewer employees) generated 66% of all new jobs in the U.S.
- ...Small independent-firms generated 52% of the total.
- ...Middle size and large firms provided relatively few new jobs.
- ...Young firms generated 80% of all replacement jobs.
- ...Small firms are more likely to die; but if they survive, they are four times more likely to expand than contract; large firms are 50% more likely to shrink than grow.

Birch also found regional differences which indicated that jobs lost by large firms in the Northeast (relocation) were almost made up by growth

TABLE 1

CLASSIFICATION OF STATE SYSTEMS FOR COORDINATING
VOCATIONAL EDUCATION TRAINING WITH ECONOMIC DEVELOPMENT

CLASSIFICATION CATEGORY	NO. OF STATES
1. <u>Highly Developed (Formal) System</u> There is high degree of coordination between economic development and vocational training functions (at least two full time staff persons responsible for needs assessment, liason, and program development); network of local staff assigned to different institutions; allocation of state dollars to support training for new and expanding industries; most of these states have curriculum centers with capacity to prepare materials quickly for different training needs; and there is proven track record of at least five years.	14
2. <u>Moderately Developed (Formal) System</u> There is at least one person working full time to coordinate and liaison between economic development and vocational training at state or local level; federal, state, and local funds are available for this effort, and the program has been in regular operation for at least one full year but less than five years; limited capacity for developing special curriculum materials.	17
3. <u>Informal System</u> There is no full time staff assigned specifically for coordination and liaison between economic development and vocational training; allocation of dollars, program development and delivery of services is on as-needed basis. There is no continuity or track record. Ad-hoc curriculum development.	19

Source: Bottoms, Gene. Testimony before the House Subcommittee on Elementary, Secondary and Vocational Education, September 17, 1980.

in jobs generated by expanding small firms.

In spite of the potential of small firms to generate new jobs, service to existing industries was not as fervent among states as was to attract new industries. Only those industries that showed interest in expanding their operations were provided services anywhere near the extent of those to the new-industries.

Recently, awareness of the needs of existing industries has increased considerably. Some states, Oklahoma, for example, have appointed existing-industry coordinators or liaisons in order to assess the needs of existing industries and to coordinate the training services to meet those needs. Unlike new-industry programs, existing industry service is provided almost exclusively by the local educational institutions such as area vocational schools or community colleges. Most state directors of vocational education agreed that this area of service to industry was going to expand in the future.

Self-Employment Training. However modest its impact on the job market, entrepreneurial training is only one area of job creation where vocational educators play a direct role. The term self-employment training means training persons to become self-employed or small businessmen. Nationwide there are only a handful of vocational education programs that train students for self-employment. However, the capacity of even most successful programs to create entrepreneurs in any significant number is rather limited. Probably that is why Bushnell in his recent study concluded that (Bushnell, 1980):

When it comes down to "creating" community-based businesses or training entrepreneurs, vocational education administrators are not very likely to be successful...knowledge about what it takes to be a successful entrepreneur is so scanty that entrepreneurship training is an irrelevant exercise.

The conclusion seems to be borne out by the observation from the AVA Project. It was found that, despite the relative success of some recent entrepreneurial training programs, enthusiasm among states for similar programs was at best lukewarm.

Few Exemplary Programs

During the course of field work, extending to case-studies of seventeen state and local vocational education programs, decision makers and program operators in both vocational education and other related agencies were interviewed to determine, the history, present operating procedures, and the impact of vocational programs that support economic development. The nature, extent, and quality of linkages between vocational education and other development agencies were also probed through interviews with the employers, community leaders, and the vocational educators. Results of the study will be published at a later date but few of the early observations are listed below.

The seventeen field study sites were selected on the basis of their geographic location and the following criteria:

- . The program should have been in operation at least one full year.
 - . The program should have established cooperative linkages between vocational education and one or more economic development agencies (State and/or local community development professionals, banks, utility companies, railroads, etc.).
 - . The program should have been aimed either at creation of additional jobs by recruitment of new business and industry into the area or at creation/development of jobs in the existing industries and businesses.
- Interviews were held on each site with significant decision makers, linking agents/coordinators, program operators, employers, elected officials, and participants.

In Battlecreek, Michigan, the Calhoun Area Vocational Center (CAVC) and Keiper Industries initiated an apprenticeship program for high school age students. The executives of this Germany-based company believed in starting training at an early age and supported the development of a program at the CAVC. The Keiper personnel officer and the director of CAVC worked for months to obtain all the state approvals necessary to initiate an apprenticeship program for high school students. Now, the door is open and several other companies are interested in a similar program. Kellogg's, in particular, has shown keen interest in a machinist apprenticeship program. Calhoun Area Vocational School, the Kellogg Community College, and the food products division of Kellogg's have entered into an arrangement whereby the apprentices hired by Kellogg complete their classroom work either at the community college or at the area vocational school. After an agreement with Kellogg's, high school students at the area vocational school will be able to go to Kellogg's for their on-the-job training to complete their apprenticeship. This will open up two different tracks to apprenticeship programs. Students will pursue their apprenticeship while still in high school and on the other hand regular apprentices at the Kellogg's plant will be able to complete their related schooling at the two participating institutions. State certification of the high school apprenticeship is the program's next goal. This will allow the graduates to accept jobs in plants other than Kellogg's and still maintain their journeymen status.

In Rugby, North Dakota, where agriculture is the main industry, local businesses have entered into a cooperative arrangement with the local school. Company employees (and other interested adults) can attend regular school classes along with secondary students. Although the participating companies as well as the involved employees benefit from this arrangement, there is a hidden benefit for the schools and its

students. Association with older and more experienced students proved a good career orientation vehicle for the young high school students who also get a chance to work in companies on a reciprocal and cooperative basis. According to the local businessmen, the program is very successful.

Expansion is only one of the ways of creating jobs; another way is to help small businesses to succeed. The Small Business Encouragement and Rescue Program is operated jointly by Westchester Community College and North Westchester Technical Center in New York. The educational institutions coordinate a program which depends on the willingness of many groups and businesses to share their resources and expertise. Seminars, workshops and technical assistance help small business owners and would-be entrepreneurs through the three stages of exploration, start-up and maintenance. To date, 475 participants have attended 20 courses, 19 seminars and innumerable workshops. Many new small businesses have successfully weathered the initial start-up months with the help of this program.

Flexibility, quick response and accessibility are key factors for the success of this program for entrepreneurs. While many services are provided as needed, the on-going courses and seminars take place at a variety of sites on a rotational basis. To reach the many small businesses located in shopping malls, courses are offered there before the stores open. Most malls have a community room which can serve as a classroom for this purpose. The project also broadcasts five-to thirty-five minute learning experiences over local radio stations, reaching directly into the businesses and homes of clients and the community. Taking service to the clients rather than asking (and expecting) them to come to the institution is, perhaps, the most innovative feature of this successful program.

In South Carolina the State Development Board is the primary agency for economic development, with technical colleges and vocational education centers providing the special training for new and existing industries. Sixty-two percent of the industrial manpower in the state has been trained in vocational and technical programs.

"Operation Job Impact" has been in operation in Camden, South Carolina, since 1970. Designed and implemented by the director of Kershaw County Vocational Center, and initiated under a federal grant, the program is bringing education and local industry into a closer working relationship. An important objective is to assess the potential capabilities of vocational students and match them with future job requirements.

The outstanding reception of "Operation Job Impact" by employers has continued even after the federal funding ceased. Over the years, the vocational center has developed linkages which helped to produce numerous innovative and exemplary programs, including industrial contract training, college extension services, comprehensive skill training, adult literacy training, developmental education labs, programs for handicapped, disadvantaged and suspended students, summer school, career orientation for youth and job fairs.

Kershaw County Vocational Center has helped to create a cohesive environment in the community, particularly in Camden. Regular meetings of community leaders and involvement of local chambers of commerce in Camden keep the Center in touch with local needs and problems at all times. Sometimes the dialogue between employers and the school transcends county boundaries and involves state agencies, particularly the State Board of Economic Development and the South Carolina Office of Vocational Education. The Center serves as an exemplary program throughout the state.

Preliminary Findings

As mentioned in the preceding section, although the information collected from the site visits has not yet been fully compiled and analyzed, several characteristics of effective linkages and mutually beneficial relationships between industry and education are already evident. Some of the characteristics are the following:

- . Strong and dedicated leadership is essential to develop effective linkages between vocational education and industry. A distinct feature of all successful programs was the leadership that decided at an early stage to shape the programs as a support system to job creation. The impact of the leadership was in all cases from top to bottom. All successful programs enjoyed strong support from state and local leaders in vocational education and state governments.
- . Flexibility was another essential characteristic of all successful programs. In order to deliver training service to industry, it is not always possible to tailor the employer needs to existing school program structures. In some places flexibility meant the instructors being given time to contact employers while in other places a reduction in red tape. In any case, flexibility proved to be a good indicator of success.
- . Mutual respect and trust is important to any relationship. But, it is even more important to linkages between education and industry. Only when the industry is convinced that the educational system is willing and capable of delivering training programs suited to their (industry) needs, will they go the extra mile to help the schools with their facilities, equipment, and personnel. In some cases, companies even underwrote a part of the cost through direct support or tuition reimbursements. In almost all cases,

company personnel were made available to work on school or advisory committees.

- . Another important factor in successful linkages was the absence of any strings attached to the training programs. In most programs even when the training program was developed specifically for an employer, the latter was under no obligation to hire all graduates or to pay any pre-determined minimum wages. Instead the program was always made as flexible as possible so that it proves a resource rather than a binding contract.
- . There was some evidence, especially in statewide programs, that they by-passed the communities with heavy black and other minority populations. Most local programs did better in this respect.
- . Analytically reliable data to indicate the number of jobs created was not available from any of the programs. Most of the records kept by program operators were found to be less than reliable and thus not appropriate for reporting. However, there was an abundance of anecdotal information both from the employers and the community leaders that the programs provided a much-needed service to the industry.
- . Contrary to popular belief, the training programs did not represent any substantial "subsidy" to the industry. Providing jobs to the residents of the area proved to be the dominant motive for vocational educators to offer vocational training programs for economic development.

Third Phase

Information collected from the field studies is being analyzed and will be used to promote new programs at places they do not exist. During the third and final phase of the project, dissemination workshops will be held

in different parts of the Country to encourage the development of closer linkages between vocational education, communities, and the industry. The American Vocational Association will provide technical assistance through March, 1982 to communities that wish to start new programs. The final report based on the procedures, field work, and the results of the technical assistance will be published during the Spring of 1982.

References

Balfour, L.G. "Skills are More Precious to Jewelry Industry than Gold or Silver." Training and Development, 34:6, June, 1980, p.9

Birch, David L. The Job Generation Process. Washington, DC: Economic Development Administration, United States Department of Commerce, 1979, pp.5-7.

Bushnell, David S. The Role of Vocational Education in Economic Development: State-of-the-Practice Report. Arlington, Virginia: American Vocational Association, 1980, pp.11-12.

Lusterman, Seymour and Gorlin, Harriet. Educating Students for Work: Some Business Roles. New York: The Conference Board, 1980, p.3.

Paul, Krishan K. "Vocational Education's Role in Job Creation and Job Development." Concept Papers: Relationship Between Vocational Education and Job Creation, Editor; Robert E. Nelson. Springfield, Illinois; State Board of Education, 1980, pp.8-11.